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ABSTRACT

A strategy to reform the educational system based upon collaboration and inclusion, vision building among all participants, the establishment of a new infrastructure, and the replacement of linear, top-down planning is explained. Each of these four goals is examined with suggestions for implementation given. After this strategy is outlined, three types of activities are given to implement the system within an educational setting. These activities are first to establish "moderating and centering groups," groups where multiple views help people refocus on the shared vision for the schools. Next, system-linked pilot efforts should be designed to provide microcosms of the vision, to create the climate necessary for all. Last, the entire system's characteristics must be modified. This will include accountability, staffing, resource allocation, curriculum and instruction, planning strategies, and parent/community involvement. Footnotes are included. (LMS)

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Configuring the Education System for a Shared Future: Collaborative Vision, Action, Reflection

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This working paper has been a truly collaborative effort on the part of the authors. The names have simply been listed alphabetically. In addition, Carleen O'Connell, of Western Organization Consultants, has been an integral part of our collaboration, and her contribution has been critical as the three of us have developed our thinking on this topic. The authors also wish to acknowledge the many colleagues with whom we have worked in both the state organizations and our home organizations.

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A New View of the Problems in Education

The conditions of today's world demand that fundamental changes are essential not only in the ways we educate our young but also in the entire education system that supports the schools in their work. Students today who simply memorize a body of facts will soon find themselves ill equipped to apply those facts. Not only will the facts be out of date, but the student may not have acquired the ability to process new information and apply new learnings. Until recently, most of the reform activities concentrated on things that students, teachers, principals, and others could do to perform their work better; now educators are beginning to realize that repairing the current system is not enough. We must change fundamentally the way we think about and provide schooling to the nation's young people.

Given their complexity and scope, the challenges we face in education constitute a metaproblem, *problematique*, or, to put it bluntly, a "mess."[1] As such, they are too extensive and multi-faceted to be handled by any single organization, no matter how large or skilled. Moreover, in every state the number of actors has increased geometrically and now includes governors, legislators, state boards, associations and community groups, social service agencies and businesses, as well as educators at several levels. Because the mechanisms for overall coordination are not well developed, solutions are pursued in isolation from one another and may be based on conflicting values. Actions and reactions add to the turbulence, compounding the already complex problems.

In order to keep moving forward despite the turbulence, many people ignore the larger reality, devising solutions to fragments of the metaproblem. The result is piecemeal action that drains energy and results in loss of meaning.

It is possible, however, to create and sustain the large-scale, complex educational improvement that system rebuilding requires by identifying and using as tools elements inherent in a given situation and by embracing the messiness of reality rather than ignoring it.

Seeds of a Strategy

To do this, the current repertoire of change strategies must be expanded to include approaches that are designed to work in large-scale, highly complex, and rapidly changing situations characterized by potential high conflict among concerned parties.

If indeed we are in the midst of rapid social change and need to transform the education system, we need seriously to consider what our overall strategy of change should be. We cannot expect a successful major transformation with a shotgun approach or one that does not recognize the amount of complexity, conflict, diversity, and interdependence involved in the education enterprise.

First of all, the strategy must be founded on collaboration and inclusion, for very practical reasons. The turbulence caused by multiple actors acting in multiple, unconnected ways; the bad policies that result from successive, disjointed compromises; the "you may win this one, but I'll get you next time" orientation that one state-level actor called "cowboys and Indians" -- those are all too costly to allow to persist.

In facing complex problems, it is critical to have diverse perspectives in order to frame problems and craft workable solutions. We can no longer afford to leave anybody out; our fates are inevitably and inextricably linked. We must move, then, beyond maximizing the self-interest of a few to maximizing the self-interests of all. Collaboration and inclusion must be the very essence of the strategy, not just something done at the beginning of some sequence of action as a step called "building ownership" or under the heading of "overcoming resistance." The inclusion must be based on the use of cooperative rather than controlling power. Vision building and action among and between organizations must use enabling power to motivate and energize others, because traditional hierarchical power loses potency the farther it travels beyond the boundaries of individual organizations.

Mobilizing and sustaining individual motivation and energy are the critical objectives here. As Harlan Cleveland notes:

> In an information-rich polity, the very definition of control changes. . . . Decision making proceeds not by "recommendations up, orders down," but by development of a shared sense of direction among those who must form the parade if there is going to be a parade. . . . Not "command and control" but "conferring and networking" become the mandatory modes for getting things done.[2]

Second, the strategy must be based on a new vision of what education is all about. As has been so well argued in the Carnegie and other reports,[3] our economic future requires people not only with basic skills but also well-developed capacities for creativity, problem solving, and high level integration and analytic thinking. Additionally, we must actively support the diversity that characterizes our nation by developing much more flexibility and creativity in instructional and organizational approaches. This vision must be a vision of the whole: it must include not only what we want for the whole child, but for the entire education system. Adults must model the same behaviors we expect the young to develop. We must finally begin to "walk our talk."

Third, the strategy must allow us to build a new infrastructure that will support and sustain the rebuilding effort -- one that connects intra-organizational and multi-organizational frameworks. Such an infrastructure would occupy the space between organizations and the society as a whole. It would include what Trist has called "referent" organization activity, which acknowledges and works from the interdependence of organizations in a problem domain. According to Trist, "So far as this process gains ground, a mode of macroregulation [in the biological sense] may be brought into existence which is turbulence-reducing without being repressive or fragmenting. Its virtue will be that it will have been built by the stakeholders themselves." Such referent organization activities would bring together multiple perspectives, without which metaproblems cannot be addressed.[4]

Finally, the approach has to be quite different from the linear and fairly top-down and impersonal planning/change strategies that are so familiar to us all: establish the goal, implement the plan, and evaluate the results against the goals. Because the type of change we are projecting is vision-based, strategies beyond mandates must be used: one can require minimums, but not maximums.

The master planning or formal analytic strategies were developed in times and for conditions where the target of change was fairly clear and stable, making it possible to analyze the situation rigorously and develop a detailed implementation plan. Over the years of the industrial society, highly refined methods of formal analysis, goal setting, and implementation strategies have been produced and have been very effective. In situations of low conflict and low complexity, it is entirely appropriate to continue to use these strategies.[5] However, for complex and often conflictful situations, a different approach is needed.

Based on an extensive review of ideas about change strategies for complex situations, we suggest that states consider an approach for moving forward on reshaping their education system that consists of three components, all premised on collaboration and inclusion. First we must move toward a shared vision of what the education system should look like and why that vision makes sense. We need to understand when to embrace diversity and interdependence and when to try to eliminate it. Second, we must stimulate productive and meaningful action that starts to make that vision a reality throughout the system. Third, we must have reflection for sensemaking -- i.e., ways to reflect on our progress and make sense out of what happens as people begin to act to implement the vision.

These are not linear steps, however. This approach is more like managing a three-ring circus where the emphasis on each ring shifts based on complex orchestration, where the rings sometimes overlap and blend together, and, above all, where actions of those involved, though guided by a common sense of theme, are not fully predicted or controlled. Simply put, its management requires creative thinking.

In these situations, no grand redesign can be articulated at the start; to the uninitiated, the methods appear fragmented, contradictory, and nonlinear. Yet upon closer examination, the underlying components of collaborative vision, action, and reflection are present, and progress is made.

However, such strategies of change require committed orchestration, strategic involvement, clever communication approaches, and a long-term commitment to achieve the desired consequences. It is not muddling through. It is purposeful, proactive, conscious, skilled management that binds together the contributions of formal analyses, political and power theories, and psychological and organizational behavior concepts. It requires full immersion in the "mess" in order to gain understanding, listen to multiple points of view, embrace the diversity and complexity, and deal with strategic parts of the system. Despite its difficulty, it seems our best hope.

Building a Shared Vision

A shared vision of an equitable and effective education system in which all students are learning more, thinking better, and are more actively engaged needs to be built among many people. Because the existing industrial model of schooling is so familiar to so many people, it is extremely difficult to build new images in people's minds of what the schools and supporting structures should look like. It is analogous to trying to have people understand what an automobile is when they are only familiar with horse-drawn buggies. The vision needs to be widely shared because so many types of people have impact on the system -- the public, business leaders, educators, state leaders, and so on.

Nearly all of us deeply involved in the education reform movement are tempted to give our answer of what the schools should look like. We contend, however, that there is no one right answer in this quest. Rather, we need to provide people with the best ideas available to stimulate their thinking, gain multiple perspectives of people involved or affected in different ways by education, and help people recognize that fundamental notions about education have to change.

As we proceed in this direction, we expect that the structure of the education system will end up looking fundamentally different. Although we cannot fully predict what the structure and character of the education system needs to be like, we can make some educated guesses based on what is known about the structures of organizations and the pressures for changes in the nature of education. Our guesses are of three types: ones related to organizational structure and processes, ones related to what is taught, and, finally, ones related to how teaching and learning are conducted.

In terms of structure, we expect an infrastructure that attends to the gaps between organizations and units and rethinks organizational boundaries. Today's problems and challenges do not respect organizational or even national boundaries. In the United States, for example, we are becoming more and more skilled in the art of management within organizations and hierarchies, moving toward a fine blend of authority and shared decisionmaking. The infrastructure for working across the boundaries of organizations and units, however, is our great weakness, the uncharted water. The infrastructure to "mind the gap" (as they say when you step onto the London subway) is fundamentally different than the infrastructure within a bureaucratic organization.

The infrastructure must be fundamentally different from most organizational structures: it must be based on inclusion and rooted in collaboration (not competition), distributed leadership (not authoritarian leadership), flexibility of processes and structures (not rigidity and repetition), and approaches to change appropriate for a turbulent environment (not only the linear models designed for stable environments). Competition, authoritarian leadership, rigidity, repetition, and linearity will not be eliminated but rather are expected to be in the background rather than the foreground of the new educational structure.

Further, the evolving infrastructure of the education system is likely to be less hierarchical, with a new consciousness of the significance of how and what we choose to standardize, what we leave to professional judgement, and what is allowed to be resolved through mutual adjustment within schools and communities. Mintzberg makes a compelling case that, as organizational work becomes more complicated, there is a shift from direct supervision to standardization of work processes, outputs, and/or skills, and finally to mutual adjustment.[6] Currently the educational reform discussions are heavily dominated by attention to "standardization of outputs" (student performance assessment) and standardization of skills (especially those of teachers and principals), but mutual adjustment -- among top-down, centralizing pressures; bottom up, decentralizing pressures; and middle-out, balancing pressures -- is increasingly a salient theme. We need to attend to the interplay of these forces as we seek a new infrastructure for education.

Task-oriented groups with cross-role membership drawn from sectors that have previously had little communication (boundary-spanning groups) and special forums for discussion and debate around the shaping of a common direction and vision will need to be increasingly used to bring parties together that have previously been isolated. This style recognizes conflict and manages it by letting the parties directly express their views to one another with the goals of mutual understanding and development of a meta-goal that advances all needs. These informal structures used in building the vision are also actually playing a role in flattening the hierarchies of the past and encompassing the groups that previously were seen as of minor or peripheral importance.

Now, in terms of what is taught, we expect that an education system more in keeping with today's world will continue to emphasize basic skills and content but that communication, problem solving, and thinking ability will be critical processes for all students -- and the adults who work with them. Indeed, basic and higher ability skills will not be taught sequentially, but in interplay, moving back and forth between the parts and the whole. Higher order thinking will be an integral part of the education of all students. Greater emphasis will be placed on synthesizing and gaining meaning from the mushrooming volume of available information and helping students develop schema to organize the bits and pieces that are an inevitable part of today's world. We would also see greater attention to the fundamental philosophies of a democratic society, again how individual parts combine to make a whole.

In terms of how teaching and learning occur, we see a future in which students are much more actively involved in learning rather than being the passive recipients of the techniques of today. For example, middle school and high school students are likely to be more involved in learning activities that also benefit their community. We would also see greater emphasis on cooperative learning.

These are examples of the issues that need to be debated as people within a state focus on developing a shared vision of the transformed education system appropriate for their state.

Developing a shared vision of a transformed education system is no simple task. As we have studied the literature on strategies of change for turbulent times, it appears that activities that help build the shared vision have some or all of the characteristics below:[7]

1. Multiple perspectives are presented to enhance understanding. People involved in different ways with education have markedly different views of the purposes, goals, and processes of education. These views need to be truly heard and understood by other involved parties as a first step in the transformation of our vision of education.

2. A core of well-regarded and capable people keep refining the best ideas of what the system should be both in terms of purpose/outcome and structure. Because it will not be immediately apparent what the system should look like in all its detail, a group of people needs to keep synthesizing and articulating the evolving view of the system to ensure that the vision is on course with the reality of the state's situation. This group of people needs to attend carefully to inclusion because all perspectives must be included in the development of a vision for a shared future.

3. People directly experience the type of learning and environment that is being espoused for use in the schools. To the extent that people can experience the new type of learning and environment and personally recognize how much more they can learn, the more likely it is that they will grasp the importance of the change. For example, if meetings are conducted where people are actively involved rather than passively observing, they can begin to see how the rate and nature of learning changes.

4. More and more people develop awareness and commitment. To establish a new norm for the education system, increasing numbers of people must become aware of and committed to the change. Careful communication strategies are needed to accomplish the adjustment in people's views.

5. Credibility is built through changing symbols and ways of talking about the schools. Public officials, other leaders, and respected citizens can be extremely influential in building credibility (or undermining credibility) by the way they use symbols and talk about schools.

6. New viewpoints are legitimized and tactful shifts are made at key moments. Leaders must understand how personal and organizational change typically proceeds and strategically legitimize new viewpoints to build the new vision.

7. Partial solutions are implemented to serve as building blocks. To the person unfamiliar with the overall change process, a partial solution can look very weak or unimportant. Yet if it is strategically undertaken within the context of a larger view of changing the education system, it can be very powerful in reshaping people's views of education.

8. Political support is continually broadened. Any major change in a system as broad and significant in society as the education system is going to affect the power base (real or imagined) of many people. People who feel they are losing power must be shown how they can adjust, avoid the loss in the new system, or even gain power, especially through developing a broader understanding of what constitutes power. As they adjust their perspective on power, they are more likely to give the necessary political support to the new approach.

9. Opposition is co-opted or neutralized. Some people may never be fully supportive of the new approaches. Leaders will need to move forward in ways that dampen their opposition.

Stimulating Productive and Meaningful Action

The building of a shared vision in and of itself typically begins to motivate people to action that will make that vision a reality. However, other stimulators of action are needed as well. We have identified at least 10 "energizers" that can be used to encourage productive and meaningful action.

Energizer 1: Harnessing self-interest. Many people act as though self-interest and the interests of the collectivity or organization are mutually exclusive. However, it does not have to be that way. Paying attention to what people want and what they are concerned about is a step in the direction of imagining the future.

Success in ameliorating an overriding problem is dependent on harnessing the energies of multitudes of individuals. What sparks engagement of a given person might be a task she or he needs to do anyway, a set of relationships that needs to be built or repaired, a desire for professional and personal growth, or just the prospect of having some fun; with any luck, it is a combination of all these. Most people want to do a good job, to have impact, so self-interest may even be engaged if individuals perceive an opportunity really to make a difference, to accomplish a larger purpose -- or vision.

Energizer 2: Compacting tasks. This energizer is an antidote to the busyness that takes on a life of its own. It is using the larger purpose to find linkages, overlaps, and concentricity that exist in the tasks of one individual and across the tasks of many individuals in the same domain. It is also packing more than one meaning into a task so that for a small amount of extra energy -- or none at all -- there can be a more significant outcome. The same kind of energy people put into negative games that undermine the direction can be put into positive games: getting two-fers, three-fers, and four-fers. This does not mean working harder or longer hours; it means working smarter, as the saying goes, or exponentially.

Energizer 3: Acting for cumulative impact. At the same time one focuses on compacting tasks, one should be assessing one's actions for their contribution to the overall goal. One needs to have an understanding of what others are doing so that each can adjust somewhat to ensure that the resulting whole is bigger than the parts, that each action magnifies the benefits of the others. Likewise, the result of each task needs to be seen as only a resting place on a journey to a future that is always slightly beyond our grasp. The tasks shouldn't be seen as ends in themselves.

Moreover, we have seen that multiple small actions can create a large effect, especially when the individual actions are taken strategically. For example, one vocational technical school in the Northeast recently assessed its offerings and decided that its priority for action was writing. Each member of the faculty -- from plumbing to science and math -- agreed to do two activities related to writing; it was reported to be the first time that the entire faculty agreed to do something jointly.

The faculty was amazed at the impact that the activities had on the students, who felt that the school was serious about writing. This gave them increased motivation to explore other activities, and they have organized a series of professional development activities to foster further steps.

In science, too, researchers have acknowledged the heretofore uncalculated but possibly very large cumulative impact of small actions.[8]

Energizer 4: Recasting conflict. The competitive world we live in leads us all to believe that there is only one right way, only one truth, only one winner, and so on. However, multiple perspectives remind us that each offers a version of reality -- each needing to be understood in order to build a metatruth. One can move from there to the kinds of action that will address the whole problem -- and all the stakeholders' shares of it -- rather than just one part of it. Multiple perspectives are a potent force because they offer us more information about an issue than any of us would have access to individually. Moving one's focus from battling out "which one is right?" to "what's the overall picture?" allows more energy to be concentrated on the problem and its solution. When that happens, the vicious cycle of winning and losing can be transformed into joint forward movement.

Energizer 5: Enabling communication. Communication is the main way we construct, reflect upon, and mirror reality; it is the major way we transfer meaning. We spend a lot of time these days collecting all types of data; much of it remains just that: "undigested, undifferentiated observations, unvarnished fact...."[9] We spend far more time "managing" (i.e., "coping with") data and information than we do analyzing or plumbing its depth.

Organizations overwhelmed by data are discovering that they can learn a lot about themselves and others by using sampling techniques for collecting data; they then spend proportionately more time setting the raw bits into context, giving them meaning that enables them to know more about less, which actually means knowing more.

Communications that enable are messages and processes that allow others to fit the parts to the whole, to see their individual actions and those of others in a new light; they are communications that successfully attach multi-dimensional meaning and significance to activities and tasks. Sensemaking is an example of an enabling communication.

Energizer 6: Fostering coherence by focusing on the larger meaning. This energizer helps to make meaning by encouraging people to find the larger connections among things rather than proceeding in bits and pieces. It is related to Energizer #2, compacting tasks, and Energizer #5, enabling communication, but is aimed at building a whole out of what might otherwise appear to be fragmented or unconnected activities. The central offices of successful school districts assist individual schools by weaving together disparate federal, state, and local initiatives into a coherent fabric of intents and actions. State departments of education facilitate the operation of districts and schools to the extent that they move beyond categorical to integrated action, with each policy initiative conceived and implemented as part of an articulated approach that guides statewide action.

Energizer 7: Transforming reactivity to proactivity. The use of cooperative power rather than coercive power spreads responsibility and control among the multiple players. Enabling leaders do not "give up" power; they multiply it by helping individuals focus on what they need to do for impact in their respective situations rather than for approval from some higher authority.

Energizer 8: Building knowledge and skills to undergird change. Successful improvement efforts are ones in which somebody has carefully measured the "amount of required change" -- that is, the gap between what is and what should be -- and has translated that into support and assistance for those involved. In almost all cases, this means professional development -- not scattered, one-shot, inspirational sessions, but knowledge and skill-development activities that are carefully targeted to the needs of both the organization and the individuals.[10]

Energizer 9: Modeling desired behaviors as the quickest way to produce change. This energizer has been captured in the expression, "walk your talk"; practicing what one preaches is not only good for one's internal consistency, it makes it possible to transfer quickly behaviors that are hard to talk about. For example, if people experience collaboration in a positive and useful way, they will be much more likely to consider collaboration in other settings. In like manner, teachers must themselves experience active learning before they can help their students to do the same.

Energizer 10. Creating productive collaborations. Collaboration of any kind, let alone cross-role or cross-organizational collaboration, is considered time consuming, cumbersome, task multiplying, resource fragmenting, not related to one's main work, and, to be frank, likely to result in credit either being diluted or going to someone else. Such perceptions are particularly likely to be held when one is looking through the lens of traditional hierarchical power. However, well-established collaborations can motivate and inspire people, generating new ideas that would not otherwise result. Therefore, collaboration is an energizer as well as being a basic theme of the strategy for rebuilding. Successful cross-role and cross-organizational collaboration has the following attributes:[11]

- Trust between partners based on interdependence: Trust comes from mutual recognition of a need for partnerships in order to accomplish goals. Participants must agree that a new opportunity requiring partners exists, and the organizations must have sufficient capability and maturity to develop systematic linkages.

- Authentic communication: It is essential to have a two-way exchange of information to enhance the public image of the partners, to encourage risk taking and to allow participants to learn from mistakes.

- Goals, tools, and purposes: Collaboration should begin with an analysis of the problem from multiple perspectives and the action needed to solve it. Resources available from the collaborators need to be determined. Goals should be defined, and it should be clear that results will be achieved more efficiently with partners than alone. The "big picture" behind the goals and purposes must be clear.

- Power used with mutual respect: Participants must be skilled in the collaboration process and overcome feelings of independence or dependency. There must be an equitable exchange among collaborators with visible and mutually enhancing outcomes.

Hindrances to effective collaboration include internal confusion and conflict that prevents successful trust building; territorial conflicts or incompatibility between partners' organizations; doubts as to the utility of the goals or vision or a high monetary, social, or "ego" cost; and poor performance history of some of the partners or little knowledge and few skills in the collaborative process.

Once energy has been stimulated, it needs to be guided to productive action. Although it is important to allow people the freedom to act as seems right for their situation, the orchestration of the process needs to use the energy to shape the consensus and coalitions that will make the shared vision a reality. It is important to:[12]

1. Solidify progress that has been made. Care must be taken to move to new activities that do not undermine the progress made by an earlier set of activities.

2. Create pockets of commitment based on positive results achieved. People need to see positive results to have a sense that progress is being made. The positive results motivate people to continue.

3. Manage coalitions to empower people at all levels. Reformers frequently talk of teacher empowerment, but systemwide change is highly unlikely unless people at all levels are truly empowered to carry out their responsibilities in ways that give them the sense that they are making the new vision a reality. Particular attention needs to be given to people such as school board members, community members, parents, superintendents, and principals. Coalitions can be extremely important in the empowerment process.

4. Find and reward champions. We are fortunate in education to have a history of recognition programs. These programs are just one tool that can be used in new ways to reward people who are playing significant roles in transforming the education system.

5. Erode consensus (yes, not all consensus is helpful) that interferes with the long-term dynamic process of improvement and renewal.

Implicit in the strategy of stimulating action is a very different notion of power and leadership than the authoritative, hierarchical one that exists in many organizations.

Many people are writing about the need for a change in our conception of power.[13] In the traditional view, power is defined as the probability that a person or group can enforce its will despite resistance. A finite amount of power is assured to exist -- some will have it and others will not. Some will win, some will lose. Competitive, adversarial, controlling, manipulative, directive -- these are the characteristics of interactions.

In situations where interdependence was of less importance, these approaches worked for many groups, organizations, and individuals. Control over individuals within an organization is possible; but exercising power over individuals outside one's organization or in a multi-organizational field is a major challenge, because sanctions are much more difficult to sustain. The view of power for today's interdependent environment is a mobilizing power, one characterized by leadership that creates an organizational vision, energizes people into action and emphasizes negotiating and bargaining to create win-win solutions, decentralized decisionmaking, worker involvement, and getting results. Here the "power comes from choice and cooperation rather than manipulation or control."[14] These are the ways of thinking about power that lead to the establishment of new norms and perspectives that can handle the stresses and strains of a turbulent environment and perhaps even reduce that turbulence.

Reflecting for Sensemaking

Individuals need to step back from the daily routine to reflect on a) the larger purpose of their actions b) the connections and fit between their actions and those of others and c) next steps. What we have called sensemaking is making time to do that. While individuals could (and should) engage in this behavior on their own, having multiple perspectives brings both more and different information to bear along with different sets of analytical and synthesizing skills. The result is a better reckoning, a more accurate reading on the situation than would otherwise be the case. Sensemaking operates on multiple parameters, then. It should include among other things: both global and linear thinking; big-picture and little-picture views; insider and outsider perspectives; past, present, and future orientations; oral and written communications; technical, psychological, sociological, and political insights; vision and task relationships; and multiple stakeholder perceptions.

It has been said that a concept is useful when it differentiates reality. Sensemaking is an occasion for bringing collective information and knowledge to bear on the subject at hand, the better to differentiate and therefore get a handle on that reality that swims all around us. It has a centering effect.

In the sensemaking process, we have found that it is especially crucial to ask the following questions:

1. Is the vision being refined and made more fitting for the situation? Are more and more people grasping its meaning and importance?

2. Are we expanding awareness and commitment to the vision?

3. Are we experiencing successes? Is what we are doing working? How do we know? How can we tell others?

4. Are we "minding the gaps?" Are we blending effectively the multiple perspectives?

5. Is the energy of people still at a high enough level to keep going?

6. Is empowerment of people at all levels occurring? Who is getting left out?

7. Are people throughout the effort learning to think better?

8. Are we attending to unanticipated consequences?

Using the Strategy

Using the preceding strategy is not easy. It requires people in a variety of roles both within and outside a state who are committed to building a new and self-renewing education system that can function in today's world in such a way that adults model behaviors that will help students better prepare to face the challenges of life.

Assuming that the strategy is to be applied within a given state to adjust that state's system, we propose that the approach used include at least three types of activities that typically are fairly weak or nonexistent in most states. These activities need to be undertaken in ways that begin to open up the hierarchical system, complementing and enhancing its valuable features while giving it the opportunity to shed the dysfunctional parts, the parts that should not be included in the new system.

The three activities are:

1. Establishing moderating and centering groups
2. Establishing system-linked pilot efforts at different places in the system
3. Modifying system characteristics

Moderating and Centering Groups

First of all, we recommend the establishment of what we refer to as "moderating and centering groups" -- groups where multiple views tend to moderate narrow perspectives and where people keep refocusing and centering on the shared vision being developed for the schools. We would see a number of such groups developed in a state -- some focused on statewide concerns, some on individual community issues -- with links among them in the form of individuals. Trist reports the operation of a number of such groups working on metaproblems in fields other than education.[15] Although we will not fully elaborate here on the features of a moderating and centering group or MCG, as we call it, we do want to point out a few critical elements. Based on the understandings gained about groups over recent years that are playing roles such as this, it is important that members of the group are well regarded by their role-group peers -- are opinion leaders -- and understand and can articulate well the views of their fellow role group members. On the other hand, they must be willing and able to adjust their perspective as they grasp more fully the changing nature of today's world and the views of other role group holders. And while the groups are relatively small, they are not exclusive; on the contrary, every effort is made to make sure no one is left out as the vision and actions are formulated. The meeting of multiple realities in a group where the norm is that of pushing for more and more creative and forward thinking is critical to breaking the barriers of the current limits of our structures, vision, and actions.

Indeed, the wide array of groups affected by education and already actively involved in attempting changes need to be represented in the MCG. It may take people outside the state to help identify the full range of groups that need involvement in the MCG, and it will take extensive discussions with people behind the scenes or uninvolved in the education bureaucracy to find the people who would be especially effective members of the group. Group members are likely to include teachers, students, community members, business people, principals, district staff, state and local school board members, legislators from both Houses and from leadership, finance and human services committees as well as education committees, state department of education personnel, higher education institutions, governing boards, the governor, and his/her staff. Many factors such as organizational representation, the daily duties of the people involved, and the mix of interpersonal skills need to be taken into account. Above all, the group must have a large number of individuals who are ready to move beyond narrow concerns of turf. As Cleveland describes,

> They are, by and large, men and women who are not preoccupied with formal power or getting their names in the newspapers, people whose concern exceeds their confusion and may even preempt their egos, because they are busy (and having fun) doing something that hasn't been done before. But what makes them the shock troops of the get-it-all together profession is, above all, their overriding concern for the general outcome of their efforts.[16]

Such a group is likely to be led best by a small steering committee of its own members with the involvement of a few people from outside the state who are well connected to what is happening in other states as other groups undertake changes in their education system. They also need to be well connected to a wide array of researchers and creative thinkers working on various factors that could have impact on how the education system might be effectively adjusted. These outside people also need to be able to help mobilize resources that can assist the MCG. These outside people should also be able to represent the developing work of the MCG to national networks and groups that are shaping the national and public view of how the education system needs to be transformed.

System-linked Pilot Efforts

Typically, pilot efforts operate as isolated activities within a school, district, or state agency and are treated as a "project" that can come or stay with little impact on the total organization or system. If the intent is to change the education system fundamentally, pilot efforts need to be designed in such a way that the pilot activities not only initiate changes in the targeted organization -- be it classroom or state agency -- but also inform and involve people in other parts of the system who need to modify their activities to create the climate necessary to support the new ways of operating. For example, it is important that the redesigned classrooms and schools are able to concentrate on the changes they need to make rather than having to spend considerable energy being at odds with the rest of the educational system.

In this sense, pilot efforts are not fragments of activity but microcosms of the vision, of the strategy we are proposing. They are like the fractals that have been discovered and described in the new science of chaos.[17] As a fractal, the strategy -- collaborative vision, action, reflection -- can operate from the macro-level down to the smallest behavior.

Recent work in one state illustrates the type of pilot design needed as a part of an overall effort to impact the system significantly. In this case, districts volunteered to participate in a consortium to enact a new vision of the skills, knowledge, attitudes, and attributes of all high school graduates. The vision had been developed by a broadly based group of educators and citizens. The districts participating in the consortium selected areas that would move them toward the new vision of a well-educated graduate. Personnel from the state department of education and regional service centers were also participants in the consortium, not to tell districts what they should do but to look at what they themselves need to do differently to collaborate with schools and districts to make changes throughout the education system.

Another approach is being used in several states where funds have been made available for schools to structure for better teaching and learning. In these cases, the unions, district, and state have to agree to waive any rules or regulations that the schools request. Such an approach then encourages the nonschool components of the education system to rethink how they need to restructure their activities and views of their roles and responsibilities.

Modifying System Characteristics

As the moderating and centering groups begin to grasp more deeply and fully the nature of the changes needed in the education system and as pilot efforts in schools and classrooms demonstrate more appropriate teaching and learning, the type of changes needed throughout the education system should

start to become more apparent. Where to start in the complex maze of a highly intertwined system is no easy decision. There are many ways one could loosely segment the system to organize an effort to think through needed systemwide changes. We are currently using the following seven:

1. Assessment and accountability systems -- with emphasis on the content and reporting of student assessments and accountability for student learning

2. Staffing -- with emphasis on school leadership and teaching and on certification, selection, training, support, and redefinition of responsibilities to reduce incumbering bureaucracy

3. Resource allocation -- with emphasis on the levels of decision making and the match between state/desired priorities for student learning and where resources actually go

4. Curriculum and instruction -- with emphasis on the mix of basic and higher-level learning, the degree of active involvement of students in their own learning, and the alignment of instructional materials, student assessment devices, and priorities for student learning

5. Planning and innovation strategies -- with emphasis on how innovation can be sparked throughout the education system and become an ongoing characteristic of the education system and how planning activities at district and state levels can be used to move the education system strategically toward the new vision of what the system should be like

6. Special assistance -- with emphasis on having a balance of assistance to adjust not only technical aspects of the system (e.g., changing actual structures of the school schedule) but also social aspects (e.g., changing interactions among people) and political ones (e.g., changing the distribution of power among groups and individuals)

7. Parent/community involvement -- with emphasis on the choices parents have and the way the community and school work together to improve the community as well as to improve the school

Note that we have not divided these system aspects up in a way that says some are the responsibility of the schools, some the district, and some the state. Rather, we see all these aspects as needing to be looked at by groups of people who represent all of these levels. Each of these system elements is influenced by every level; it is looking at the connections (or disconnections) among levels that is likely to be especially informative in determining how to adjust the system.

Neither have we separated them by preschool, elementary, middle, secondary or other types of schools because these aspects need to be looked at across levels. Of course, once these system aspects are studied and reconceptualized in terms of how they support a new vision of how the education system functions, actions will need to be taken within the various state, district, and school units.

In many states, the functions and types of schools are not really connected to one another except bureaucratically. They tend to operate as nearly autonomous fragments without mutual adjustment either laterally or vertically. In other states, the functions are organized vertically -- or categorically -- so that, for example, curriculum people at the state level talk and work with others of their role type at the regional, district, and school levels. In only a few states is integration -- or horizontal connections -- manifestly a major concern. In such states, the individual specialists at different levels view their particular operations as part of a whole and are interested in the mutual adjustments that can be made to make the whole enterprise move forward. These are organizations where individuals are encouraged to pay as great or greater attention to the boundaries of their work -- where their tasks bump up against those of others -- and to think about the needs of others as they design and conduct their activities.

An example comes from one state where the testing and assessment people in the state department of education work closely with curriculum people to think about the impact of statewide tests on curriculum. The state likewise works closely with local districts to understand what they would like to learn from testing programs. Activities become user-centered rather than task-driven. Overarching all these strands of effort is a policy vision focused on achieving equity of schooling outcomes at high levels -- higher order thinking, for example.

In the same state, a district and community, concerned that their curriculum was overcrowded, has undertaken what might be called a centering and focusing effort to determine what their real priorities are and how to configure for them. They want the experiences their children and young people have in school to constitute a whole rather than bits and pieces. For them, too, the components need to relate to the larger picture.

To proceed in this work, they are learning the skills of facilitation and participatory group process, learning effective ways to get everyone in on the act without having to have everyone at every meeting.

Even in such a state, cross-level, multi-organizational capacity and participatory processes are only minimally developed. For example, state or district agencies still too often act in their own self-interest rather than on behalf of all the stakeholders in education; they operate as paternalistic solution-givers, as though they are the only ones who can figure out the answer to the problem, rather than in a way that all perspectives become a part of the solution. In such a situation, as Peter Drucker has observed, "Each institution pursues its own specific goal. But who then takes care of the common weal?"[18] The answer is that we all must.

Here We Go

> None of us can expect to act on more than a tiny corner of the great complexity. But in our interrelated society, itself part of an uncompromisingly interdependent world, we have to think about the whole complexity in order to act relevantly on any part of it.[19]

The strategy we have described is neither a quick fix nor a one-shot effort. It must become an inherent part of the way we function. The strategy is one that cannot operate solely by communications up and down the formal hierarchical or bureaucratic lines. It is highly dependent on effective, authentic, trusted communications among peers working in a variety of settings and among people with differing roles where each is viewed with respect and with a responsibility to change in ways that increase the understanding and actuality of the new vision of the education system.

Such communication is especially important in times of major transition because many people are trying new approaches and gaining insights to both anticipated and unanticipated consequences of actions, implications for consequences of actions, implications for next steps, and conditions that affect success that need to be personally shared and discussed. Of course, "diseases" can also spread quickly among groups. Thus, key people in the groups must be asking tough questions and thoughtfully probing to ensure that experiences and ideas transmitted via the groups are critiqued and viewed from multiple perspectives.

The above activities all need to be operating simultaneously and strategically as the change effort proceeds. These activities are, of course, not the only ones that need to be undertaken, but they are essential ones that are frequently not put in operation because they are not a regular part of the existing hierarchical system.

So to answer the questions that readers may have about next steps, we can say that the place to begin is where you can, with the people who are affected. While this paper reflects on the issue more than it offers specific strategies for forging ahead, we have tried to offer some helpful suggestions, (e.g., the 10 energizers to action in the first part of this paper). And we can assure you that our visions and

reflections are based in large part on our first-hand knowledge of real action in several states by committed individuals. To join them, the only initial obligation is to desire to go "beyond cowboys and Indians," beyond turf issues, beyond individual self-gain, to see the intersect of many diverse interests in a shared future. It's the obvious choice.

Let us emphasize that a strategy to focus on the shared future is not a do-good approach. It is pure pragmatism. We have run out of room to move on, leaving behind problems for others to deal with. The rallying cry at the time of the American revolution -- that we must all hang together or else we shall all surely hang separately -- is more compelling today than it was then. Our new frontier is bringing the inter-personal, the task, and the larger purpose together as we enact the future.

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